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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Frederic Bushman et al. Examiner: Arun Chakrabarti, Ph.D.
Serial No.: 09/583,342 Group Art Unit: 1634
Filed: May 31, 2000 Docket: 1211.002US1
Title: METHOD OF IDENTIFYING INHIBITORS OF TOPOISOMERASE DNA
RELIGATION

RECEIVED

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

NOV 25 2002

Commissioner for Patents
Washington, D.C. 20231

TECH CENTER 1600/2900

Sir:

In response to the Office Action mailed June 12, 2002, please consider the following remarks and amendments.

In the Specification

Please make the paragraph substitutions indicated in the appendix entitled Clean Version of Amended Specification Paragraphs. The specific changes incorporated in the substitute paragraphs are shown in the following marked-up versions of the original paragraphs:

Please replace the paragraph at page 3, lines 10-27 with the following paragraph:

The present invention provides high-throughput methods of screening compounds capable of modulating topoisomerase activity by incubating at least a first nucleic acid, a topoisomerase and a potential topoisomerase-modulating compound, wherein the nucleic acid is operatively associated with at least one tag, and assaying for nucleic acid religation. It is then possible to measure the level of substrate nucleic acid religation activity in the presence and absence of the topoisomerase-modulating compound, wherein the level of religation activity is inversely proportional to the effectiveness of the topoisomerase-inhibitory compound. The nucleic acid may be single-stranded or double-stranded DNA, or single-stranded or double-stranded RNA. The tag may be a detection tag or an affinity tag. The method may [involve]